Power Integrations Introduces TinySwitch(R)-III Power Conversion IC Family

Next Generation of World's Leading High-Voltage IC for Power Supplies Enables Lower Total System Cost, Greater Design Flexibility

SAN JOSE, Calif.--Feb. 1, 2006--Power Integrations (Nasdaq:POWI - News), the leader in high-voltage analog integrated circuits for power conversion, today introduced TinySwitch-III, the third generation of the company's popular family of ICs for energy-efficient power supplies. TinySwitch-III is the industry's most energy-efficient, highly integrated, cost-effective IC for universal-input power supplies ranging from 3 W to 28 W. TinySwitch-III is well suited for use in a wide array of power supply applications, including DVD players, white goods, industrial controls, chargers for portable electronics, and standby power for PCs, servers and LCD TVs.

With its high level of integration and robust feature set, TinySwitch-III enables simple, flexible designs with far fewer components than competing discrete and integrated solutions. TinySwitch-III features a 700 V MOSFET alongside low-voltage control circuitry on a monolithic IC. Other features include integrated auto-restart, input under-voltage and output over-voltage protection, hysteretic thermal shutdown, and frequency jittering to minimize EMI.

TinySwitch-III offers unmatched design flexibility through the use of selectable current limits, allowing the designer to choose any of three current limit values for each family member without any additional IC pins or external components. A key enhancement from previous generations of the TinySwitch line, this feature allows designers to optimize their power supplies for either maximum efficiency or greatest power output. Also, adjacent family members have matching available current limits, permitting the substitution of one TinySwitch-III family member for another without redesigning the transformer.

TinySwitch-III employs an ON/OFF control scheme, which delivers virtually constant efficiency regardless of load. By contrast, PWM and self-oscillating designs exhibit diminishing efficiency as load decreases. Constant efficiency is a key advantage with respect to recent efficiency standards for external power supplies, which specify an average efficiency across a range of load levels. TinySwitch-III also enables easy compliance with the most stringent standards for standby and no-load energy use, consuming less than 150 mW of no-load power without the use of a bias winding on the transformer.

Introduced in 1998, the original TinySwitch was the first high-voltage power conversion IC to utilize ON/OFF control to regulate the output of a power supply. This breakthrough was the basis of Power Integrations' patented EcoSmart® energy-efficiency technology, which dramatically reduces the amount of electricity consumed by power supplies in both active and standby modes of operation. Power Integrations has sold more than 800 million TinySwitch units since 1998, and more than one billion ICs incorporating EcoSmart technology.

"The original TinySwitch touched off a revolution in the power supply industry for low-power applications," said Balu Balakrishnan, president and CEO of Power Integrations. "The innovative ON/OFF control scheme enabled huge gains in energy efficiency, while the high level of integration dramatically simplified the design of switching power supplies. The enhancements included with TinySwitch-III provide the next step in cost-effectively allowing engineers to simplify their designs in a variety of high-volume markets such as cell phone chargers, white goods, DVD players and PCs," continued Balakrishnan.

New in TinySwitch-III

Feature	Benefit
Selectable current limit	Increased design flexibility -- three current limits available for each IC, allowing trade-offs between power output and efficiency/thermal rise
Extended power range	Addresses universal-input power supplies with up to 28 W of output, compared to 15 W for TinySwitch-II
Even lower no-load consumption	Less than 150 mW at 265 VAC input without use of a bias winding; Less than 50 mW achievable with bias winding

```
On-time extension  Typically reduces size of bulk capacitor required
                   for low-line power delivery/hold-up time
-------------------------------------------------------------------
```

TinySwitch-III is available in lead-free, plastic through-hole DIP-8 and surface-mountable SMD-8 packages. Pricing in 1000-piece quantities for the TNY274PN, a 6 W part in a DIP-8 package, is $0.79 each. The TNY280PN, a 28 W part, is priced at $1.45 each. Small quantities of each type are available from factory stock, with production quantities available 6 weeks ARO.

Complete documentation for the TinySwitch-III family can be found on the Power Integrations web site at www.powerint.com/tiny3product.htm. The new product family is also supported by a reference design kit, the DAK-91, which includes a fully tested 12 V, 1 A power supply, an engineering test report and product samples.

About Power Integrations

Power Integrations, Inc. is the leader in high-voltage analog integrated circuits for power conversion. The company's breakthrough technology enables compact, energy-efficient power supplies in a wide range of AC-DC and DC-DC applications. The company's EcoSmart® energy-efficiency technology, which dramatically reduces energy waste, has saved consumers and businesses around the world more than an estimated $1.3 billion on their electricity bills since its introduction in 1998. For more information, visit the Power Integrations website at www.powerint.com.